

# **DEPARTMENT OF THE AIR FORCE**AIR FORCE LOGISTICS MANAGEMENT AGENCY

# LETTER REPORT QUALITY ASSURANCE TRACKING AND TREND ANALYSIS SYSTEM (QANTTAS) REVISION

PROJECT MANAGERS
MSGT MAURA A. BARTON
MSGT STANLEY G. MYNCZYWOR

SENIOR ANALYST MS MARY DONALD, GS-12

AFLMA PROJECT NUMBER: LM199832400
March 2000

BACKGROUND: QANTTAS is an automated system used by Quality Assurance (QA) sections to track and perform trend analysis on maintenance personnel evaluations and equipment condition inspections. QANTTAS also provides the option to track other programs that are assigned to QA to include abort incidents (air or ground), dropped objects, foreign object damage, functional check flights, lost tools, impoundments, local manufacture, modification proposals, one-time inspections, quality deficiency reports, source maintenance recoverability (SMR) code change proposals, Time Compliance Technical Order monitoring, technical order improvements proposals, IDEA Program, and zero over-pricing.

The tracking and trend analysis capabilities of QANTTAS were projected to be incorporated into the Integrated Maintenance Data System (IMDS) by 1999, however, initial fielding of IMDS has been delayed until 2001, further delaying the incorporation of the QANTTAS requirements until possibly 2003. The last version of QANTTAS (3.1) was developed using dBase IV and is not Y2K compliant.

The delay of IMDS, coupled with QANTTAS 3.1 not being Y2K compliant, necessitated the need for an interim program that would allow QA sections to maintain tracking and trend analysis capabilities. The loss of a reliable system would have an adverse impact on the Quality Assurance Program (QAP).

**TASKING:** HQ AFRC tasked the AFLMA to create a Y2K compliant version of QANTTAS that will meet the needs of QA sections in the Air Force Reserve Command and other Air Force units until incorporated into IMDS.

DTIC QUALITY INSPECTED 2

Approved for Public Release
Distribution Unlimited

20000509 104

**METHODOLOGY:** Representatives from Air Force Reserve units met with AFLMA project team members in November 1998. Using existing software developed by the 440<sup>th</sup> Airlift Wing, General Mitchell IAP, Air Reserve Station, Wisconsin, as a baseline, the representatives defined/developed requirements for the new program, designated QANTTAS 4.0.

Preliminary programming was finished in May 1999. This was followed by three-months of preliminary testing of the program at the 908 AW/LGQ, Maxwell AFB. Throughout the test, AFLMA provided hands-on training to QA personnel and continuously diagnosed, troubleshot and fine-tuned the program as needed. Maxwell QA personnel tested the program operations to ensure the established requirements were met.

In July 1999, four units--301 FW/LGQ (fighter/attack aircraft), 352 AW/LGQ (multiple MDS aircraft), 440 AW/LGQ (cargo aircraft) and 908 AW/LGQ (cargo aircraft)--were selected as "beta" test locations. Beta testing consisted of actual data input and use of the program for three-months (July through September 1999). During the beta test, AFLMA continued to analyze, problem-solve, and adjust the program when needed.

The beta units met with AFLMA project team members for the final review of QANTTAS 4.0 in October 1999. Final programming was completed in November 1999.

**CONCLUSION:** QANTTAS 4.0 was developed in ACCESS 97 and designed as a Local Area Network (LAN) application. It is easier to use than QANTTAS 3.1 and incorporates many new features. Some of the new features include:

- 1. Multiple user access--permits multiple users to access the program at the same time.
- 2. "Real time" updates/inquiries--allows users at all levels from the workcenters up through the Logistics Group Commander to have access to the data.
- 3. E-mail capability--offers e-mail connection to notify workcenters when a response is needed on an evaluation/inspection or abort.
- 4. Flexible trend analysis capabilities--supplies users with standard charts and the ability to import the data into EXCEL to create additional charts.
- 5. Standard/Ad-hoc reports--provides the user with flexible reporting tools.

QANTTAS 4.0 presents an effective way for QA sections to continue to collect and analyze evaluation/inspection data both into the new century and until incorporated into IMDS.

## **RECOMMENDATION:**

- 1. Release QANTTAS 4.0 to HQ AFRC/LGMPQ for control and distribution (Air Force wide).
- 2. Update AFRCI 21-101, Aircraft Maintenance Guidance and Procedures, authorizing OANTTAS 4.0 as the automated information system for use by Quality Assurance.
- 3. Update the AFLMA website to reflect the availability of QANTTAS 4.0 through HQ AFRC/LGMPQ.
- 4. Limit AFLMA involvement to "consulting" during the transition from AFLMA to HQ AFRC.

**DISTRIBUTION:** Refer to attached standard Form 298.

# REPORT DOCUMENTATION PAGE

FORM APPROVED OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services. Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Sulte 1204 Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for falling to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

consolion of michination in a document display a se	inding raise date definition in the second of the second o				
1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED (From - To)			
March 2000	Software/Letter Report	January 1999 - January 2000			
4. TITLE AND SUBTITLE		5a. CONTRACT NUMBER			
	g and Trend Analysis System	5b. GRANT NUMBER			
(QANTTAS) Revision		5c. PROGRAM ELEMENT NUMBER			
6. AUTHOR(S)		5d. PROJECT NUMBER			
,	FLMA/LGM, DSN 596-4581	5e. TASK NUMBER			
Mary Donald, AFLMA/LG	iY, DSN 596-4524	5f. WORK UNIT NUMBER			
7. PERFORMING ORGANIZATION NAM		8. PERFORMING ORGANIZATION REPORT NUMBER			
Air Force Logistics Manag	ement Agency/LGM	134100000400			
501 Ward Street		LM199832400			
Maxwell AFB, Gunter Ann	nex AL 36114-3236				
9. SPONSORING/MONITORING AGENC	Y NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)			
HQ AFRC/LG					
155 2nd St, Robins AFB, C	GA 31098-1635	11. SPONSOR/MONITOR'S REPORT NUMBER(S)			
12. DISTRIBUTION/AVAILABILITY STATEMENT					

Approved for public release. SAF/PAS approval # 00-0211 28 Apr 2000.

13. SUPPLEMENTARY NOTES

#### 14. ABSTRACT

QANTTAS 4.0 was programmed in MS ACCESS 97 and is used by base-level Quality Assurance sections for automated tracking and trend analysis of evaluations of job proficiency, degree of training and compliance with technical data for maintenance personnel. QANTTAS 4.0 also provides the option to track the many ancillary programs that are assigned to the quality assurance section; abort (air or ground) incidents, dropped objects, foreign object damage, functional check flights, lost tools, impoundments, local manufacture, modification proposals, one-time inspections, quality deficiency reports, SMR code change proposals, TCTO monitoring, technical order improvements proposals, IDEA program, and zero overpricing.

### 15. SUBJECT TERMS

Quality Assurance, trend analysis, evaluation,

16. SECURITY CLASSIFICATION OF		17. LIMITATION OF ABSTRACT	17. NUMBER OF PAGES	19. NAME OF RESPONSIBLE PERSON  MSgt Maura A. Barton	
a. REPORT Unclassified	b. ABSTRACT Unclassified	c. THIS PAGE Unclassified	Unlimited	2	20. TELEPHONE NUMBER DSN: 596-4581